

- Blackall, W. E., and B. J. Grieve, 1956 and 1965. *How to Know Western Australian Wildflowers*. Parts 2 and 3. Univ. W. Aust. Press: Nedlands.
- Gardner, C. A. 1930. *Enumeratio Plantarum Australiae Occidentalis*. Govt. Printer: Perth.
- Gardner, C. A. 1942. The vegetation of Western Australia with special reference to the climate and soils. *J. Roy. Soc. W. Aust.*, 28: 11-87.
- Gentili, J. 1963. *Regional and Economic Geography for Secondary Schools*. Carroll's Pty. Ltd.: Perth.
- Johnson, W. 1950. A geological reconnaissance survey of the area including parts of the Yalgoo, Murchison, Peak Hill and Gascoyne Goldfields. *Bull. Geol. Surv. W. Aust.*, No. 106.
- Woodward, H. P. 1914. A geological reconnaissance of a portion of the Murchison Goldfield. *Bull. Geol. Surv. W. Aust.*, No. 57

## A COLLIE BIRD LIST

By E. H. SEDGWICK, Harvey

The township of Collie is almost entirely surrounded by Jarrah forest, a fact apparent from aerial photographs in which the township appears as a hole in the forest.

Observations made in and about the town relate to: (a) The urban area—a typical country town of, at the time of my observations, about 9,000 inhabitants. (b) The jarrah forest. (c) A limited belt of small holdings, mainly under pasture, each of about five acres and a few somewhat larger farms. (d) The valleys of the Collie River and its tributaries. (e) The Wellington Dam.

Although the writer was domiciled in the town for six years (1956-1962) opportunities for serious bird observing were limited. However, the paucity of district bird lists relating to the jarrah forest block and the fact that no Collie list has been published appears to justify presenting the list which follows even though it constitutes only an outline of the avifauna.

### THE LIST

Emu (*Dromaius novae-hollandiae*).—I noted several sets of tracks near the Wellington Dam, but only once saw an Emu near Collie.

Painted Quail (*Turnix varia*).—Quail were seen on two occasions close to Collie. These were not positively identified, but the forest habitat in each case suggested Painted Quail.

Senegal Turtledove (*Streptopelia senegalensis*).—Though I took up residence in Collie at the beginning of 1956, I did not see a turtledove there until July 10, 1957. Thereafter, until I left Collie at the end of 1962, I recorded single birds from time to time and, on one occasion, two birds.

Common Bronzewing (*Phaps chalcoptera*).—Often encountered in and near the town. The principal concentration in the town is in the railyard.

Crested Pigeon (*Ocyphaps lophotes*).—One reported by a reliable witness as seen on several occasions in the Cheetarra area and a bird seen by another observer in the railyard could have been of this species. I observed none myself, though I made search, but consider the reports—particularly the former—reliable.

Coot (*Fulica atra*).—One bird seen on the Collie River adjacent to the Golf Links on April 6, 1958.

Little Grebe (*Podiceps ruficollis*).—In 1956 I was given an excellent description of a Little Grebe which had been seen on a swamp. Two birds which I saw on the Collie River adjacent to the Golf Links, I identified as immature Little Grebe.

Black Cormorant (*Phalacrocorax carbo*).—Single birds seen occasionally along the Collie River.

Little Black Cormorant (*Phalacrocorax sulcirostris*).—One seen by a river pool on May 18, 1958.

Little Pied Cormorant (*Phalacrocorax melanoleucos*).—Seen occasionally by the Collie River and at Mungallup Dam.

Australian Darter (*Anhinga novae-hollandiae*).—One seen on September 1, 1957, near Minninup Pool and one on May 7, 1960, near Griffin Bridge.

Banded Plover (*Zonifer tricolor*).—Birds seen singly or in pairs on the Recreation Ground, the oval adjacent to the High School and in pasture lands near the town.

Black-fronted Dotterel (*Charadrius melanops*).—At least two adults noted by Wellington Dam. After dark on February 21, 1957, a juvenile was trapped in the beam of a lamp and caught in a dip net as it attempted to escape by swimming.

Southern Stone-Curlew (*Burhinus magnirostris*).—Reported as occurring at Allanson.

White-faced Heron (*Ardea novae-hollandiae*).—Observed by the Collie River, at Mungallup Dam and on low-lying pastures.

White-necked Heron (*Ardea pacificus*).—A bird seen in flight over the town on May 5, 1956 was almost certainly of this species and in July 1957, a year of invasion, two were seen between Collie and Darkan.

Maned Goose (*Chenonetta jubata*).—One bird observed standing on a log in the Collie River on February 19, 1961.

Black Swan (*Cygnus atratus*).—One bird was seen on the Collie River in 1956. Nocturnal flights were heard in passage over the town from time to time. One, in June 1956, comprised c. 30 birds seen surprisingly plainly, their underparts being illuminated, apparently by the town lights.

Black Duck (*Anas superciliosa*).—Single birds, pairs and small parties seen from time to time on the Collie River and on the Wellington Dam.

Grey Teal (*Anas gibberifrons*).—Present at times on the Wellington Dam.

Musk Duck (*Biziura lobata*).—Noted twice on the Collie River and once on Wellington Dam.

Australian Goshawk (*Accipiter fasciatus*).—One bird observed in September 1956, over outskirts of the town, pursuing a magpie.

Collared Sparrowhawk (*Accipiter cirrocephalus*).—One bird observed circling over forest in April 1956.

Wedge-tailed Eagle (*Aquila audax*).—Two birds observed in flight near Allanson in February 1957.

Whistling Eagle (*Haliastur sphenurus*).—One bird noted over town in March 1957.

Black-shouldered Kite (*Elanus notatus*).—A bird said to be attacking domestic pigeons was shot in Collie and brought to me for identification.

Little Falcon (*Falco longipennis*).—A bird was observed in flight over the town in May 1957. On May 30, 1961 an injured, helpless bird was brought to me. To my surprise, it recovered

rapidly and was released on June 5. Apparently immature, it called "Kek-kek-kek" for food and showed little fear at any time.

Brown Hawk (*Falco berigora*).—Noted twice only.

Boobook Owl (*Ninox boobook*).—Reliably reported as occurring at Allanson.

Purple-crowned Lorikeet (*Glossopsitta porphyrocephalus*).—My records fall into the October-March period, tending to reach a peak with the February and March flowering of the marri.

White-tailed Black Cockatoo (*Calyptorhynchus baudinii*).—Occurrence is uneven, but birds were noted during most months of the year. Pine plantations attracted large flocks—one I estimated at 200—during February and March each year, when the birds harvest the pine seed.

Little Corella (*Cacatua sanguinea*).

Galah (*Cacatua roseicapilla*).

Regent Parrot (*Polytelis anthoepilus*).

Budgerygah (*Melopsittacus undulatus*).—Though all flew freely, all the foregoing are assumed to have been aviary escapes. All were seen singly about the townsite. The Corella was present for approximately twelve months. Galahs were seen in October 1957 and in January 1961, presumably different birds.

Western Rosella (*Platycercus icterotis*).—Present, mainly along water courses.

Red-capped Parrot (*Purpureicephalus spurius*).—Frequent, appearing in the town and feeding in gardens, e.g., on White Cedar, *Melia azedarach*, seeds, apples, wild oats and sunflower seeds.

Port Lincoln Parrot (*Barnardius zonarius*).—Almost certainly less frequent than the preceding species.

Elegant Parrot (*Neonhema elegans*).—Present on pasture land adjacent to the town. Noted in August, December and February.

Tawny Frogmouth (*Podargus strigoides*).—Recorded twice.

Laughing Kookaburra (*Dacelo gigas*).—Widely distributed.

Sacred Kingfisher (*Halcyon sanctus*).—The first seasonal record in 1960 was on September 18. In other years first appearances were in the first half of October. Few, if any, birds remained later than February. Breeding was noted in the town.

Rainbow-bird (*Merops ornatus*).—This species was not observed until November 20 in 1960, but in other years birds appeared in October.

Pallid Cuckoo (*Cuculus pallidus*).—Apparently much more irregular in movement than the two foregoing species. First appearances were: September 26, 1956; July 20, 1957; October 2, 1958; June 16, 1959 (first typical call, July 5); July 17, 1960; mid-September, 1961.

Fantailed Cuckoo (*Cacomantis flabelliformis*).—Noted fairly frequently in the forest.

Horsfield Bronze Cuckoo (*Chrysococcyx basalis*).—Typical call heard on July 14, 1957.

Golden Bronze Cuckoo (*Chrysococcyx lucidus*).—This is the common Bronze Cuckoo of this area. It arrives from late August to early October. In September and October birds were conspicuous feeding in our garden. On September 27 one was seen to take a caterpillar and feed it to a second bird of the species. On October 9, we twice had five birds in view at one time, all within twenty yards of one another and feeding upon hairy caterpillars.

Welcome Swallow (*Hirundo neoxena*).—Occurs in the town, nesting under shop verandahs, and in suitable habitats adjacent to the town.

Tree Martin (*Hylochelidon nigricans*).—Common in and about the town, favouring the vicinity of river pools and reservoirs.

Grey Fantail (*Rhipidura fuliginosa*).—Common and widespread in forest and river valleys, appearing in our garden at intervals, e.g.: July 1957, June 1958 and March 1961. A flock of at least twenty was noted in riverside vegetation on December 30, 1956 and a group noted as "at least six" in a mixed association on April 28, 1957.

Willy Wagtail (*Rhipidura leucophrys*).—Occurs in the town and is frequent on small farms and adjacent to the town.

Restless Flycatcher (*Seisura inquieta*).—Encountered on one occasion only, moving steadily away from the river through jarrah forest.

Scarlet Robin (*Petroica multicolor*).—Fairly well-distributed in areas outside of the town and appearing occasionally in town gardens.

Red-capped Robin (*Petroica goodenovii*).—A few seen on farmland near the town and at Allanson. One was reported on a Harris River farm and one in the Wilson Park area.

White-breasted Robin (*Eopsaltria georgiana*).—Noted in several localities in dense vegetation adjacent to water.

Western Yellow Robin (*Eopsaltria griseogularis*).—Noted occasionally in jarrah forest.

Golden Whistler (*Pachycephala pectoralis*).—Noted mainly in riverside localities and once only in our town garden.

Western Shrike-Thrush (*Colluricincla rufiventris*).—Well-distributed in forest country.

Magpie Lark (*Grallina cyanoleuca*).—Conspicuous in the town and on adjacent farmland. Flocks were noted in July 1956 and in March 1957.

Black-faced Cuckoo-Shrike (*Coracina novae-hollandiae*).—Occurs in and about the town.

White-winged Thriller (*Lalage sueurii*).—Noted in the town, but only during October and November 1956.

White-fronted Chat (*Epthianura albifrons*).—Noted only on the small grazing properties adjacent to the town.

Western Warbler (*Gerygone fusca*).—Well-distributed in and about the town.

Western Thornbill (*Acanthiza inornata*).—Flocks noted in the forest.

Broad-tailed Thornbill (*Acanthiza apicalis*).—Noted in and about the town.

Yellow-tailed Thornbill (*Acanthiza chrysorrhoa*).—Observed mainly in farmland areas.

Spotted Scrub-Wren (*Scricornis maculatus*).—Noted in only three localities, in dense vegetation adjacent to water.

Reed Warbler (*Acrocephalus stentoreus*).—Calls heard from a Collie River reed bed in January 1956 were almost certainly attributable to this species.

Splendid Wren (*Malurus splendens*).—One of the most frequent species adjacent to the town.

Red-winged Wren (*Malurus elegans*).—A party of two fully-plumaged cocks and one brown bird was seen at the Hamilton River before the valley was cleared, and one fully-plumaged cock and several brown birds were seen in a moist, low-lying area to the south of the Mungallup pine plantations. These are my only Collie records.

Dusky Wood-Swallow (*Ariamus cyanopterus*).—Flocks frequented the northern part of the town at least in 1956. On two successive nights in June a flock of from twenty to forty birds roosted clinging in a compact mass to the bole of a dead jarrah on a vacant block. At other times birds were noted in flight over the town.

Black-capped Sittella (*Neositta pileata*).—Noted sparingly in the forest.

Rufous Tree-creeper (*Climacteris rufa*).—Two groups were located in jarrah forest, one near Lyalls Mill and one near the turn-off to the Wellington Dam on the Collie-Roelands road.

Spotted Pardalote (*Pardalotus punctatus*).—With the exception of an October record in 1960 all records fall into the mid-March to early June period. Birds were recorded in riverside locations, usually among flooded gums, *Eucalyptus rudis*.

Red-tipped Pardalote (*Pardalotus substriatus*).—Present among eucalypts from October to April.

Western Silvereye (*Zosterops gouldi*).—Probably the most frequent species in and about Collie.

White-naped Honeyeater (*Melithreptus lunatus*).—Infrequently noted in forest.

Western Spinebill (*Acanthorhynchus superciliosus*).—Occurs in forest.

Brown Honeyeater (*Lichmera indistincta*).—Observed on a number of occasions, usually feeding on *Banksia verticillata* blossoms.

Singing Honeyeater (*Meliphaga virescens*).—Noted twice only—in April 1956 one bird was seen on part cleared land near the town and in May 1960 two birds were observed in *Eucalyptus rudis* near the locality of the previous observation.

Yellow-winged Honeyeater (*Phylidonyris novae-hollandiae*).—These birds are very frequent in the river valleys, though numbers are not constant in any one area. The size of the flocks is not easy to estimate owing to the habits and habitat of this species, but estimates ranged up to seventy individuals.

Little Wattle-bird (*Anthochaera chrysoptera*).—Recorded infrequently.

Red Wattle-bird (*Anthochaera carunculata*).—Occurs in and about the town. Apparently nomadic.

Australian Pipit (*Anthus novae-seelandiae*).—Observed on pasture land near the town.

Red-eared Firetail (*Zonaeginthus oculus*).—Noted on several occasions along river valleys. A nest under construction was observed on June 3, 1956, but this was not used, at least for some time.

Raven (*Corvus coronoides*).—Well distributed in areas adjacent to the town.

Grey Currawong (*Strepera versicolor*).—Not very frequent, but observed on thirteen occasions in a number of locations in forest and river valleys. All of my records fall within the April-

October period, but this may reflect the pattern of observation rather than a movement of the species.

Grey Butcher-bird (*Cracticus torquatus*).—Occurs in and about the town.

Western Magpie (*Gymnorhina dorsalis*).—Noted in the town and on adjacent farmlands, often associated with Magpie Larks.

## FROM FIELD AND STUDY

**Distinctive Odour in *Typhlops***—*Typhlops* is a genus of small burrowing snakes which occur over a wide area of Western Australia. I frequently receive live specimens brought in by my students. All of the snakes have given off an offensive odour when handled, distinctive from that of all other reptiles known to me.

—R. P. McMILLAN, Guildford Grammar School, Guildford.

**Sighting of a Yellow Western Rosella**—On January 6, 1967, I called on a friend at Marbellup, about ten miles from Albany. While watching and photographing birds on his property we sighted a yellow Western Rosella (*Platycercus icterotis*) flying with three normal coloured birds. When it landed in a large tree I tried to photograph it but it was too fast on the flight.

From what I saw of this bird I would say it was a mature male; the colour was all yellow except the lower abdomen and under tail which were a bright red.

—F. NORTH, Attadale.

**The Crab *Planes minutus* Associating with a Turtle**—At the annual Guildford Grammar School excursion to Rottneet I, on November 20, 1965, one of the students found a turtle on Cape Vlamingh Reef. When we examined the animal a small crab was found under the carapace at the base of the tail. While we were dislodging the crab the turtle kept raising its tail which had the effect of pressing the crustacean to the underside of the carapace "verandah." This, and the way the crab "hooked" on with its legs, made the creature very difficult to dislodge. The crab, a female in berry, was identified as *Planes minutus* (Linn.) by Mr. John Lucas of the Zoology Department of the University of W.A.

The crab's association with the turtle adds to the examples of methods of passive transport of animals around the seas of the world. In *The West Australian* of October 30, 1965 a news item featured the discovery of a small crab, *Carcinus maenas*, in the Swan River estuary. It was mentioned that it might have been brought here in ships' cargo or by clinging to debris.

The ventral surface of the turtle was a very obvious white, the flippers had dark brown spots on them ventrally and the fore-flippers had sharp claws at the second joint. The overlapping scales on the dorsal surface of the animal were patterned with brown and black. The main feature of it was its very polished and clean appearance. Unfortunately the turtle escaped capture but was provisionally identified as a Hawksbill Turtle. Six goose barnacles were found in a clump on the costal portion of the carapace. I have collected Loggerhead Turtles in the vicinity of Carnac I. and Point Peron, all of which have had an algal growth on the dorsal surface of the carapace.

—R. P. McMILLAN, Guildford Grammar School, Guildford.